## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

- (Previously amended): A medical diagnostic device for measuring an analyte
  concentration of an electrically conductive biological fluid, comprising a multilayer
  structure having a first layer and a second layer sandwiching an intermediate layer,
  - (a) the first and second layers each comprising an insulating sheet, the first layer having a <u>first</u> conductive surface adjoining the intermediate layer, the second layer having a first insulating surface and a second insulating surface, wherein the first insulating surface adjoins the intermediate layer,
  - (b) the intermediate layer being an insulating layer with a cutout, having a first end and a second end, which, together with the first and second layers, defines a capillary channel to permit the sample to flow from the first end to the second end,
  - (c) the capillary channel comprising (i) a dry reagent for reacting with the sample to yield a change in an electrical parameter that can be related to the analyte concentration of the fluid and (ii) an electrochemical cell, within which the electrical parameter is measured,
  - (d) the <u>first</u> conductive surface having a first insulating pattern scored into it to divide the <u>first</u> conductive surface into two regions, insulated from each other, wherein the insulating pattern has at least one serration, whereby sample that flows across the pattern provides a conductive path from the first end to the second end.
- (Original): The device of claim 1, in which the first end of the cutout is at a first edge of the intermediate layer and the second end is at a second edge of the intermediate layer, opposite the first edge.
- 3. (Currently amended): The device of claim 1, in which the dry reagent is on the <u>first</u> conductive surface.
- 4. (Original): The device of claim 1, in which sample that enters the flow channel at the first end flows through the electrochemical cell, before it reaches the first insulating pattern.

- 5. (Original): The device of claim 1, in which the biological fluid is blood and the analyte being measured is glucose.
- 6. (Currently amended): The device of claim 1, in which the first layer comprises a metallized thermoplastic sheets.
- 7. (Original): The device of claim 1, in which the intermediate layer comprises a thermoplastic sheet having adhesive on both surfaces for adhering to the first and second layers.
- 8. (Currently amended): The device of claim 1, in which the reagent on the <u>first</u> conductive surface comprises a buffer, a mediator, and an enzyme.
- 9. (Cancelled):
- 10. (Currently amended) device of claim 91, in which the insulating pattern has wherein said at least one serration is within the flow channel pointing toward each end of the channel.
- 11. (Currently amended): The device of claim 1, further comprising a second insulating pattern scored into the <u>first</u> conductive surface of the scored layer between the first end and the first insulating pattern to divide the scored layer <u>first</u> conductive surface into three regions, insulated from each other.
- 12. (Original): The device of claim 11, in which sample that enters the flow channel at the first end reaches the second insulating pattern before it flows through the electrochemical cell.
- 13. (Original): The device of claim 1, further comprising electrical circuit means for detecting the flow of fluid through the flow channel.

## Claims 14-16 (Withdrawn):

- 17. (Currently amended): The device of claim 1, in which the dry reagent is on the first insulating surface. and the insulating pattern is scored into the conductive surface.
- 18. (Previously presented): The device of claim 1, in which the first insulating surface has disposed thereon a second conductive surface.
- 19. (Previously presented): The device of claim 18, in which the second layer comprises a metallized thermoplastic sheet.
- 20 (Currently amended): The device of claim 9-1, in which the serration includes at least one vertex that points towards the second end, whereby flow is enhanced through the capillary channel.